APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/659,121	09/10/2003	Youssef Hamadi	305228.01	3556

22971 7590 11/13/2009
MICROSOFT CORPORATION
ONE MICROSOFT WAY
REDMOND, WA 98052-6399

EXAMINER
LAM, HUNG H

ART UNIT	PAPER NUMBER
2622	

NOTIFICATION DATE	DELIVERY MODE
11/13/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

roks@microsoft.com
ntovar@microsoft.com

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS,
WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>07/29/09</u>.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-6,9-16,19-30 and 37-42</u> is/are pending in the application.

     4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-6,9-16,19-30 and 37-42</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>10 September 2003</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

     a)☐ All   b)☐ Some *   c)☐ None of:

        1.☐ Certified copies of the priority documents have been received.

        2.☐ Certified copies of the priority documents have been received in Application No. _____.

        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

     * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

Response to Amendment

1.   The amendments, filed on 07/29/09, have been entered and made of record. Claims 7-8, 17-18 and 31-36 are canceled. Claims 37-42 are added. Claims 1-6, 9-16, 19-30 and 37-42 are pending.

Response to Arguments

2.   Applicant's arguments filed 07/29/09 have been fully considered but they are not persuasive.

Regarding independent claims 1, 11 and 21, the Applicant's representative argues that "Maynard's RFID tag identifies only one asset, and therefore fails to disclose or suggest multiple possible matches. In addition, Maynard's second data storage area is not narrowed based on the RFID identification in the first data storage area of the RFID tag. Accordingly, the asserted combination of He and Maynard fails to disclose or suggest "identifying a second object in the image using a library of potential **matches** narrowed based matches narrowed based upon the first identifier of the first object, the second object being identified by a second identifier that is different from the first identifier."

The Examiner respectfully disagrees. Maynard teaches a second storage area within the RFID for storing a second set of data describing an asset and components within said asset and including at least a model number data, serial number data, and

date of manufacture data (Fig. 3; see tag data and asset data; abstract; Col. 4, Ln. 42-

60). Therefore, the asset includes a model number data, serial number data, and date

of manufacture data representing a library of potential matches. Maynard's second data

storage area is believed to be more narrowed based on the RFID identification in the

first data storage area of the RFID tag because the second storage area store data that

describe the data more specifically (Fig. 3; see tag data and asset data; abstract; Col. 4,

Ln. 42-60: model number data, serial number data, and date of manufacture data).

Accordingly, the combination of He and Maynard do read on the claims limitations.

        In addition, with respect to dependent Claims 37, 39 and 41, Applicant notes that

Maynard's RFID tag identifies both the tag, and an asset to which the tag is associated

and/or attached. Accordingly, He and Maynard both fail to disclose or suggest that "the

first object does not identify the second object."

        The Examiner respectfully disagrees. As presented by the Applicant, He further

suggests to "capture an image of an object and captures an ID (identification) from an

RFID tag, and consult a database to determine whether the object and the ID match. If

they do match, then the ID identifies the object in the captured image. If they don't

match, then the ID identifies a different object than the (mystery) object in the captured

image, and the object in the captured image remains un-identified. Thus He either

identifies the object in the captured image or identifies a different object not shown in

the captured image (see Applicant's remark pages 9; He's Abstract, He's: [0049-

0062])". Thus He reference encompass the limitations because the mystery object

image and the wrong RFID tag code can not be used to identify the second object from the first object.

In addition, with respect to dependent Claims 38, 40 and 42, Applicant notes that both Maynard and He fail to disclose or suggest identifying the second object using image recognition, as variously encompassed by the present claims. In particular, both He and Maynard fail to disclose or suggest "wherein the library of potential matches comprises visual image models and the identifying the second object comprises comparing the visual image models with the captured image to identify the second object.

The Examiner respectfully disagrees. As presented by the Applicant, He further suggests to "either identifies the object in the captured image or identifies a different object not shown in the captured image (see Applicant's remark pages 9; He's Abstract, He's: [0049-0062])". He also suggest various verifications processing by comparing captured image with stored image data including each side, view face, front and/or back and by the face determination module and extract data module in order to determine a potential match ([0050-0060]). Thus He does in fact read on claims 38, 40 and 42.

Claim Rejections - 35 USC § 103

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains.
Patentability shall not be negatived by the manner in which the invention was made.

4.   Claims 1-6, 9-16, 19-30 and 37-42 are rejected under 35 U.S.C. 103(a) as being

unpatentable over He (US-2004/0,118,916) in view of Maynard (US-5949335).

        With regarding **claim 1**, He discloses a method comprising:

        requesting identification of a first object in association with a capture of an image

(Fig. 2; RFID block; abstract; [0010-0011; 0027-0029; 0032-0033);

        receiving a first identifier, responsive to the requesting operation, the first

identifier identifying the first object in the image ([0029-0033]).

        However, He fails to explicitly disclose identifying a second object in the image

using a library of potential matches narrowed based upon the first identifier of the first

object, the second object being identified by a second identifier that is different from the

first identifier.

        In the same field of endeavor, Maynard teaches an RFID tagging system

wherein the RFID includes a first storage area for storing a first set of data uniquely

identifying the transponder tag and including at least one of manufacturing site code

data and serial number data. Maynard further teaches a second storage area within the

RFID for storing a second set of data describing an asset and components within said

asset and including at least a model number data, serial number data, and date of

manufacture data (Fig. 3; see tag data and asset data; abstract; Col. 4, Ln. 42-60). In

light of the teaching from Maynard, it would have been obvious to one of ordinary skill in

the art at the time the invention was made to modify the device of He to include a

second storage area within the RFID in order to store second object information describing an asset and component within said asset. The modifications thus allow the device to retrieve further detailed information based upon the data uniquely identifying the transponder tag.

With regarding **claim 2**, He discloses the method of claim 1 wherein the first object is an active object, and the identifier of the active object is received from the active object (abstract; [0029-0033]: object inherently active in order for the RFID block to activate the object for receiving RFID signals).

With regarding **claim 3**, He discloses the method of claim 1 wherein at least one of the objects is a delegate object, and wherein the identifier of the delegate object is received from another object (He: abstract; [0005-0007]; Maynard: Fig. 3: see tag data and asset data ; [abstract; Col. 4, Ln. 42-60]).

With regarding **claim 4**, He discloses the method of claim 1 further comprising: capturing the image, wherein an image capture device performs the requesting, receiving, and capturing operations (Figs. 2-3; imaging 14; abstract; [0012; 0025; 0039; 0044]).

With regarding **claim 5**, He discloses the method of claim 1 further comprising: associating the identifier with the image ([0005-0008; 0020-0024]).

With regarding **claim 6**, He discloses the method of claim 1 further comprising: extracting a model associated with the identifier from a model library (Fig. 6; extract data module 616 and/or comparator module 608; abstract; [0056-0058]; Maynard: [abstract; Col. 4, Ln. 42-60]).

With regarding **claim 9**, He discloses the method of claim 1 further comprising:

identifying a sub-portion of a model library based on the identifier ([0051-0057]); and

evaluating the image using a plurality of models in the sub-portion of the model library to identify objects in the image ([0012-0013; 0051-0057; 0060-0063]; Maynard: [abstract; Col. 4, Ln. 4-60]).

With regarding **claim 10**, He discloses the method of claim 1 further comprising: associatively storing with the image one or more parameters relating to the object identified in the image ([0005-0008; 0020-0024]; Maynard: [abstract; Col. 4, Ln. 42-60]).

With regarding **claim 11**, the claim contains the same limitations as claimed in claim 1. Therefore, claim 11 is analyzed and rejected as discussed under claim 1.

With regarding **claim 12**, the claim contains the same limitations as claimed in claim 2. Therefore, claim 12 is analyzed and rejected as discussed under claim 2.

With regarding **claim 13**, the claim contains the same limitations as claimed in claim 3. Therefore, claim 13 is analyzed and rejected as discussed under claim 3.

With regarding **claim 14**, the claim contains the same limitations as claimed in claim 4. Therefore, claim 14 is analyzed and rejected as discussed under claim 4.

With regarding **claim 15**, the claim contains the same limitations as claimed in claim 5. Therefore, claim 15 is analyzed and rejected as discussed under claim 5.

With regarding **claim 16**, the claim contains the same limitations as claimed in claim 6. Therefore, claim 16 is analyzed and rejected as discussed under claim 6.

With regarding **claim 19**, the claim contains the same limitations as claimed in claim 9. Therefore, claim 19 is analyzed and rejected as discussed under claim 9.

With regarding **claim 20**, the claim contains the same limitations as claimed in claim 10. Therefore, claim 20 is analyzed and rejected as discussed under claim 10.

With regarding **claim 21**, He discloses a system comprising:

a processor (Fig. 3; CPU 302 and/or micro controller 304);

a memory coupled to the processor ([0039]);

a signaling module (Fig. 2; RFID block) coupled to a digital capture device (imaging engine 14) requesting identification a first object in association with a capture of an image (abstract; [0010-0011; 0027-0029; 0032-0033]); the signaling module further receiving an identifier identifying the first object in the image, responsive to requesting identification ([0029-0033]).

However, He fails to explicitly disclose an identifying module configured to identify a second object in the image using a library of potential matches narrowed based upon an identity of the first object, the second object being identified by a second identifier that is different from the first identifier.

In the same field of endeavor, Maynard teaches an RFID tagging system wherein the RFID includes a first storage area for storing a first set of data uniquely identifying the transponder tag and including at least one of manufacturing site code data and serial number data. Maynard further teaches a second storage area within the RFID for storing a second set of data describing an asset and components within said asset and including at least a model number data, serial number data, and date of manufacture data (Fig. 3; see tag data and asset data; abstract; Col. 4, Ln. 42-60) . In light of the teaching from Maynard, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of He to include a second storage area within the RFID in order to store second object information describing an asset and component within said asset. The modifications thus allow the device to retrieve further detailed information based upon the data uniquely identifying the transponder tag.

With regarding **claim 22**, He discloses the system of claim 21 wherein at least one of the objects is an active object, and the identifier of the active object is received from the active object (abstract; [0029-0033]: object inherently active in order for the RFID block to activate the object for receiving RFID signals; Maynard: [abstract; Col. 4, Ln. 42-60]).

With regarding **claim 23**, He discloses the system of claim 21 wherein at least one of the objects is a delegate object, and wherein the identifier of the delegate object is received from another object (abstract; [0005-0007]; Maynard: Fig. 3: see tag data and asset data ; [abstract; Col. 4, Ln. 42-60]).

With regarding **claim 24**, He discloses the system of claim 21 further comprising: an image capture module capturing the image (Figs. 2-3; imaging 14).

With regarding **claim 25**, He discloses the system of claim 21 further comprising: a registration module associating the identifier with the image ([0005-0008; 0020-0024]).

With regarding **claim 26**, He discloses the system of claim 21 further comprising: a model extractor extracting a model associated with the identifier from a model library

(Fig. 6; extract data module 616 and/or comparator module 608; abstract; [0056-0058];

Maynard: [abstract; Col. 4, Ln. 1-41).

With regarding **claim 27**, He discloses the system of claim 21 further comprising:

a model extractor extracting a model associated with the identifier from a model library

(Fig. 6; extract data module 616 and/or comparator module 608; abstract; [0056-0058];

Maynard: [abstract; Col. 4, Ln. 42-60]); and

an object matching module evaluating the image using the model to determine

whether the object is in the image (face detection module 612 and/or comparator

module 608; abstract; [0056-0058]).

With regarding **claim 28**, He discloses the system of claim 21 further comprising:

a model extractor identifying a sub-portion of a model library based on the identifier

([0057]; Maynard: [abstract; Col. 4, Ln. 42-60]).

With regarding **claim 29**, He discloses the system of claim 21 further comprising:

a model extractor identifying a sub-portion of a model library based on the

identifier ([0051-0057]; Maynard: [abstract; Col. 4, Ln. 42-60]); and

an object matching module evaluating the image using a plurality of models in

the sub-portion of the model library to identify objects in the image ([0012-0013; 0051-

0057; 0060-0063]).

With regarding **claim 30**, He discloses the system of claim 21 further comprising:
an image storage module associatively storing with the image one or more parameters
relating to the object identified in the image ([0005-0008; 0020-0024]).

With regarding **claim 37**, He discloses the method of Claim 1, wherein the first
object does not identify the second object ([0049-0062]): He references encompass the
limitations because the mystery object image and the wrong RFID tag code can not be
used to identify the second object from the first object).

With regarding **claim 38**, He discloses the method of claim 1, wherein the library
of potential matches comprises visual image models, and the identifying the second
object comprises comparing the visual image models with the captured image to identify
the second object (He also suggest various verifications processing by comparing
captured image with stored image data including each side, view face, front and/or back
and by the face determination module and extract data module in order to determine a
potential match; He: abstract; [0050-0060]).

With regarding **claim 39**, the claim contains the same limitations as claimed in
claim 37. Therefore, claim 39 is analyzed and rejected as discussed under claim 37.

With regarding **claim 40**, the claim contains the same limitations as claimed in
claim 38. Therefore, claim 40 is analyzed and rejected as discussed under claim 38.

With regarding **claim 41**, the claim contains the same limitations as claimed in claim 37. Therefore, claim 41 is analyzed and rejected as discussed under claim 37.

With regarding **claim 42**, the claim contains the same limitations as claimed in claim 38. Therefore, claim 42 is analyzed and rejected as discussed under claim 38.

Conclusion

5.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

6.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to HUNG H. LAM whose telephone number is (571)272-7367. The examiner can normally be reached on Monday - Friday   8AM - 5PM.

        If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, SINH TRAN can be reached on 571-272-7564. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

        Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system.   Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

HL
11/08/09

/Sinh Tran/
Supervisory Patent Examiner, Art Unit 2622